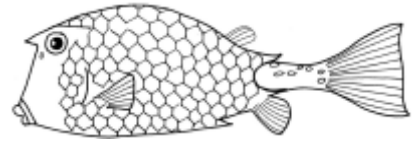


Name_____



Group Members:

Fish Adaptations

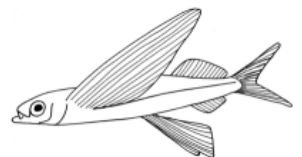
Introduction

Does the coloration of an animal affect its chances for survival? Do feeding mechanisms alter an organism's chance of living? How would an organism's reproductive strategy affect the individual? How would it affect the species? Throughout time, people have marveled at the great amount of diversity found in nature. It is adaptations, however, that have led to this vast array of variation and which have resulted in the enormous variety among species. In this activity, you will be studying the effects that an adaptation, any feature which increases an organism's reproductive success (fitness) in its environment, has on a fish's success in different habitats.

Materials: large sheet of white bulletin board paper, markers, scissors, glue, pencil, colored pencils, stapler

Procedure

1. Choose one of each type of adaptation for fish-jaw shape, body shape, coloring and reproductive strategy-before designing your fish.
2. Using the paper and pencils provided, design, color, and cut out one fish showing all of the four adaptations.
3. Assign your fish a scientific name and a common name. Write both in the space below and on your fish.
4. On the larger piece of paper, draw and color the *habitat* in which your fish would be well-suited for survival.
5. Place your fish in its habitat and secure gently with tape if necessary.
8. Place your fish in the new environment and reevaluate the probability of success for your fish.
9. Answer the questions below then turn in both your fish and its *original* habitat.
10. Write a description of your fish. Be creative. You may write your description in the form of a newspaper article, an interview or a scientific journal report. Your information may be hand written or typed. **ATTACH YOUR WRITTEN DESCRIPTION TO THIS LAB.**



Analysis Questions

Name of your fish - _____

1. How do adaptations increase the likelihood for an animal's survival?

2. **type of fish** – agnatha, chondrichthyes (cartilaginous fish), osteichthyes (bony fish)

3. **habitat** – where does your fish live in the ocean? (coral reef, kelp forest, abyss)

4. **migration** – does your fish migrate or live its entire life in one region?

5. **location in the world** - what ocean(s) does your fish live in?

6. **coloration/camouflage, defense adaptations** –

7. **how they swim/move/anchor** –

8. **physical features** – body shape, type of fins and # of fins, scales, size, mouth position, eye position, nostril position, barbels, etc.

9. **predators/prey** – what does your fish eat and what eats your fish?

10. List at least two other unique adaptations

11. List and justify any adaptations which will *limit the success* of your fish in its new habitat.

12. List and justify any adaptations which will *enhance the success* of your fish in its new habitat.

13. Which adaptation is most important for the survival of the individual fish? Explain your reasoning.

14. Which adaptation is most important for the survival of your fish's species? Explain your reasoning.

